

Executive Summary

# Scaling up Responsible Digital Payments in the Rwandan Tea Sector

March 2023



Ethical Tea  
Partnership

BETTER THAN CASH  
ALLIANCE

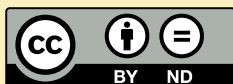


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Cover photo: UNICEF/UN0308775/Rusanganwa

ISBN 978-1-946173-87-4



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## FOREWORD



The Ethical Tea Partnership (ETP) is dedicated to supporting our members enhance transparency and accountability across the tea supply chain. Responsible digital payments are one way in which to achieve this, whilst at the same time, proactively safeguarding and enabling users, particularly women who make up most of the tea workers and farmers, to reap the benefits of digital financial inclusion.

For this reason, we joined the UN-based [Better Than Cash Alliance](#) to build on ETP's existing initiatives to digitize various parts of the tea supply chain to increase uptake of digital financial tools and services within the tea communities.

We are delighted that our first joint publication presents clear evidence that [responsible digital payments](#) help promote industry growth, boost productivity, and have the potential to improve the livelihoods for 100,000 tea farmers and workers in Rwanda.

This report provides a dual function of sharing knowledge on how digitizing payments can benefit both companies and tea workers, but more importantly how to deliver this responsibly and at scale for the tea industry.

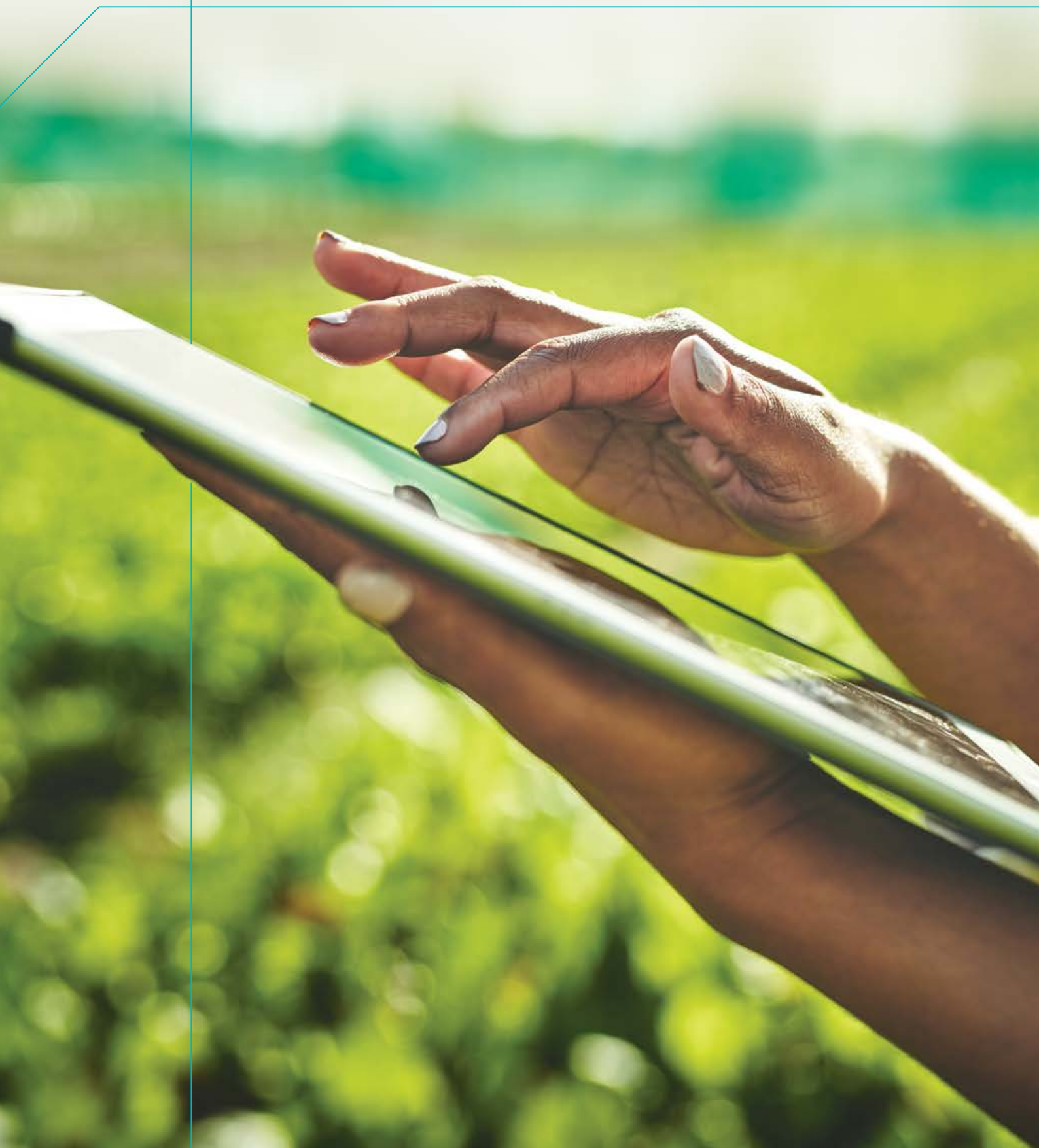
Beyond receiving their payments and wages digitally, we would like to see tea workers and their wider communities benefit from using digital financial tools and services, so they are not exposed to the continual risks that come with 'cash in hand' payments. This requires investing in solutions that promote transparency, accountability and interoperability to boost confidence and economic stability.


We are committed to working closely with all stakeholders in the Rwandan tea sector to address the gaps that remain for scaling responsible digital initiatives. The ETP and the Alliance are supporting the Government of Rwanda's goal to [become a cashless economy by 2024](#). In particular we see our engagement with the National Agricultural Export Development Board (NAEB) as critical for exploring sustainable and scalable solutions for the tea sector.

**JENNY COSTELLOE**  
Executive Director  
Ethical Tea Partnership



# EXECUTIVE SUMMARY





This study lays the foundation for incorporating United Nations Principles for Responsible Digital Payments in the Rwandan tea sector, with the goal of increasing efficiency and improving farmers' living incomes.

The Government of Rwanda views the **tea sector as central to the country's economic development** across several key dimensions in support of the Sustainable Development Goals (SDGs), including its potential to raise smallholder farmer incomes (SDG 10), advance toward zero hunger (SDG 2) and thereby reduce poverty (SDG 1), promote gender equality (SDG 5), and provide good returns and investment opportunities for private investors (SDG 8).

**The tea sector is the third-largest employer in Rwanda,** behind coffee and the public sector, directly contributing to the livelihoods of around 1 million Rwandans. The sector employs over 100,000 people, including 50,000 farmers and 50,000 workers in various roles in the value chain. In the fiscal year 2020/2021, revenue from tea exports was valued at \$90 million,<sup>1</sup> up from \$52 million in 2014 – a growth of over 73 percent in six years.<sup>2</sup> Based on the Rwandan tea pricing mechanism that requires 50 percent of total sales to be paid to farmers, **it is estimated that farmers were paid \$45 million in the fiscal year 2020/2021.**

The 2020 agricultural household survey by the National Institute of Statistics of Rwanda indicates that **women, at 57 percent, constitute the majority of farmers across Rwanda's agricultural sectors.** Tea, like many agricultural industries, relies on a female workforce. Yet women are often underrepresented at senior managerial levels. There are no employment data disaggregated by gender for the tea sector in Rwanda, making it hard to track progress against gender goals such as digital financial inclusion.

FIGURE 1

**Potential gains from responsibly digitizing payments for farmers in the Rwandan tea sector**

## Companies



Around **\$8 million savings\*** over 10 years that could be spent on addressing climate change issues

At least **10%** **reduction in plantation wages** due to the eradication of ghost workers

Approx. **30% increase in productivity** and/or potential to improve quality



## Financial service providers

Access to **new agribusiness customers**, whose farmer base collectively make up the largest private-sector customer segment

Digitizing SACCOs led to approx.:

- **34% increase in savers**
- **40% increase in value saved**
- **Increased profitability**

## Farmers



### FINANCIAL SECURITY

**87% reduction in payment timelines**

(from 4 weeks to 3 days)

**Biweekly payments** is an incentive with potential for stronger cash-flow management

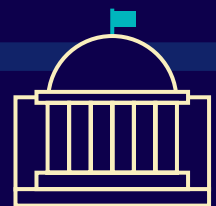
Approx. **30% increase in productivity** and/or quality of harvest, enabling increased incomes

**Increased visibility of deductions**, building trust and retention

### FINANCIAL INCLUSION

**Lower interest rates** on digital loans (potential 42% reduction)

## Government bodies



Supporting the drive for a **cashless economy**

**Inward investment from companies** seeking traceable supply chains, having clear visibility of the farmers and the farms they procure from

\* By removing time spent by farmers collecting cash payroll and admin staff cost handling cash payroll

In 2021, **seven of the 18 tea factories were paying their farmers using digital systems**, using a mix of mobile money solutions, automated savings and credit cooperative organizations (SACCOs), and online/mobile banking. These seven companies serve about 22,000 smallholder tea farmers (48 percent of the total). They say that using digital payments has resulted in a **minimum 10 percent reduction in plantation worker costs due to the eradication of “ghost workers”** and a **30 percent increase in productivity**, with the potential to improve product quality. In Figure 1, we further explore the benefits that could be achieved by scaling up responsible digital payments in the tea sector, including that **an estimated \$8 million could be saved over 10 years by paying farmers digitally** – funds that could be reallocated to address the critical issues affecting the sector, such as climate change.

These benefits could bring much wider impact if **responsible digital payments** were embedded across the whole agricultural sector in Rwanda, with the potential to reach 3.8 million farmers, including 2.1 million women.<sup>3</sup>

Globally, advances in digital technology and telecommunications have presented new financial-inclusion opportunities for smallholder farmers in rural areas and for value-chain efficiencies. In Rwanda, there is a strong **drive within government toward achieving a cashless economy** through digitization. All the necessary policy and regulatory reforms are in place to support the digitization of agricultural value chains. Examples that illustrate these commitments include (i) the appointments of chief digital officers in all ministries, (ii) the initiation of public-private partnerships to introduce innovative digital solutions for the agricultural sector (e.g., the Smart Nkunganire System and the Smart Kungahara System, SKS), and (iii) the automation of the Umurenge SACCOs by the National Bank of Rwanda (BNR).

A core theme of the strategic plan of the National Agricultural Export Development Board (NAEB) is to develop its capacity on the strategic analytics that will facilitate data-driven decisions. **SKS forms a part of this strategy and there are plans to introduce it in the tea sector.** Introducing this payments system, already being used in the coffee sector, presents an opportunity to digitize the remaining supply chains operating manual systems, with longer-term goals to migrate all supply chains to this system. In addition, the Information and Communications Technology for Rwanda Agriculture (ICT4RAG)

An estimated  
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 paying farmers  
 digitally

### Information and communications systems in place or being developed

The Smart Kungahara System is a digital solution developed for farmers by BK Techouse in partnership with the National Agricultural Export Development Board. It enables and standardizes the real-time reporting of cash-crop produce data across entire value chains, enabling data-driven decision-making. It is currently used in the coffee value chain.

The online export services system is used to provide certificates of quality and origin for tea and coffee. All tea and coffee exporters are registered in this system.

E-soko is an online marketplace being developed for agricultural commodities, to link buyers and sellers of Rwandan tea, coffee, and horticultural and emerging commodities.

Strategy (2016-2020) aimed to promote the use of digital technologies in agricultural lending, input supplies, subsidies, and advisory services. It had a clear objective to “Expand access to and the uptake of rural and agricultural financial services.” To build on the progress to date, the Ministry of Agriculture and Animal Resources is drafting a follow-on digital strategy, due for publication in 2022.

The COVID-19 crisis has further illustrated the importance of digital financial services and platforms. One of the pandemic’s most visible impacts worldwide, but in Rwanda in particular, has been the dramatic acceleration toward digital solutions and digital payments. In Rwanda, government data show that the growth in person-to-person (P2P) transfers has been phenomenal, in both value and volume. In the first week of January 2020, the total value of funds sent via P2P transfers was RWF7.2 billion (around \$7.6 million). In the last week of April 2020, the value sent reached RWF40 billion (over \$42 million) – an increase of over 450 percent. The number of unique subscribers making P2P transfers doubled from 600,000 in the week before lockdown to 1.2 million in the week after it. In the final week of April 2020, some 1.8 million individuals made P2P transfers.

In many parts of the world, including Rwanda, the acceleration of digitization may, though, continue to deepen the rural and gender digital divides. These divides exclude farmers, rural merchants, and women from growth and resilience. Responsible payment principles thus need to be applied in the ongoing digitization initiatives in the tea sector.

The value of funds sent via P2P transfer increased over **450%** from January to April 2020









# **KEY RECOMMENDATIONS** to Responsibly Scale Up Digital Payments in the Tea Sector

The framework of the United Nations Principles for Responsible Digital Payments provides a focused approach to scaling up digital business-to-person payments in a way that benefits tea farmers and rural communities, especially women, as well as tea value-chain actors and financial service providers (FSPs), while also contributing to sustainable national economic growth.<sup>4</sup> These principles advocate responsible practices in the digitization of payments: what it means to be responsible, who needs to be responsible, and how to be responsible. The proposed approach for the Rwandan tea sector builds on the evolving payments ecosystem and identifies six key areas of action, requiring a multi-stakeholder approach, to ensure farmers are at the center of a responsible and sustainable scale-up of digital payments.



**To ensure farmers benefit from digitization, factories must lead the transition.**

**The Government of Rwanda can facilitate accountability at each step of the digitized value chain, especially as the technology evolves.**

As businesses look to gain the efficiencies of digital payments over cash transactions, the complexity of the platforms and relationships that enable these can create challenges. In the Rwandan tea sector, there are several areas of the value chain that have been digitized and/or are supportive of the existing digital payments systems. While all expert components of the value chain have implemented digital solutions, including payments, there has been limited digitization at the level of smallholder tea farmers and their workers.

Where digital payments have been implemented in the tea value chain, they have provided benefits for tea farmers - namely, time savings (reported by 30 percent of farmers interviewed) and a reduction in transport costs (reported by 23 percent). But more effort is needed by FSPs to improve user experience and to address the issues of fraud, fees transparency, and access to money.

Rwanda has implemented legislation and regulation to ensure that digital payments systems and providers treat users fairly. In light of the experiences of tea farmers and the emerging ethical implications of payments technologies, there is increasing urgency to hold service providers accountable for generating and responding to data on user experience and satisfaction. Collaboration between FSPs, mobile money operators (MMOs), cooperatives, SACCOs and tea factories can also help to improve oversight and to identify challenges in farmer payment journeys.



**As the tea sector is reliant on a workforce that has a majority share of women, it is essential to increase their access to and use of digital payments and other digital financial services. FSPs, in partnership with the factories, should tailor their services to the financial needs of women farmers. In addition, further development of the SKS system by NAEB could enable reporting of disaggregated employment data as soon as 2024.**

The lack of employment data disaggregated by gender for the tea sector in Rwanda makes it hard to track progress against gender goals such as digital financial inclusion. This gap needs to be addressed.

All farmers value the importance of mobile payments and the role that SACCOs continue to play in providing access to finance for rural farming communities. Most farmers registered in the tea SACCOs are men, however, even though most of the work is done by women. Full access, transparency, and control over payments are therefore not always possible for women. Facilitating the opening of payment accounts for women is important to enable equal access to and usage of digital accounts. This would be in line with the gender mainstreaming approach under the government's financial inclusion strategy.

Access to gender-disaggregated data and a detailed understanding of women farmers' financial needs are limited in the tea sector. Tea factories can work with FSPs to collect and share data that can determine specific financial use cases and solutions for women farmers, such as savings and credit.

FSPs, especially mobile money providers, must also pay attention to designing payments solutions that are user-friendly and accessible for women to grow and sustain account usage. Over half of the farmers interviewed were not comfortable using their current digital payments services, and two thirds of women farmers needed guidance to use these solutions, indicating a significant gap in user experience.



## 3

**All farmers and factory workers have the right to their funds as soon as they are disbursed digitally by the factories. To ensure digital payments are “better than cash” it is recommended that factories and FSPs coordinate to ensure funds are immediately available.**

For most tea factory workers and farmers, the introduction of digital payments has helped to improve the predictability of access to funds. In addition, there are cost and time savings from using these types of payment platforms. Nevertheless, the limited network of mobile agents, coupled with a lack of sufficient float, undermines the ability of tea farmers to access their money when they need it, especially where the payments ecosystem does not yet allow for end-to-end digital transactions. A quarter of farmers also experienced challenges in accessing the mobile network, which again meant they did not have access to their funds when needed. As a result, many farmers and other users simply resort to cash transactions. This is not unique to the tea sector, therefore improving agents' liquidity management and FSPs providing more support across rural areas, will bring more confidence to users, which in turn will increase adoption and usage across rural landscapes.

## 4

**FSPs, through the government's leadership, must accelerate progress to full interoperability, as per the Rwanda National Digital Payment System, to increase efficiencies and scale, and to reduce farmers' costs.**

Although it is currently not possible to transact seamlessly across different mobile money platforms, the Government of Rwanda is implementing the Rwanda National Digital Payment System (RNDPS), which is expected to deliver interoperability across MMOs. Barriers still exist in transacting across platforms, exacerbated by higher costs in transacting across platforms, resulting in the limited uptake of digital payments systems. It is anticipated that the RNDPS will be fully operational in 2023, which will allow users to transact seamlessly across mobile money platforms at a nominal cost, resulting in a higher uptake of digital payments.

Interoperability is dependent on the digitization of value chains downstream from the farm level. For some farmers, the costs associated with using mobile money to pay for goods and

services is too high. Micro-merchants opt to use P2P transfer, which passes the cost to the consumer, rather than incur a 0.5 percent merchant fee on mobile money payments. Farmers therefore choose to cash out. To ensure interoperability benefits the farmers, the first point of call is the automation of the SACCO. To date, the project to digitize all 416 Umurenge SACCOs has been rolled out in all three districts of Kigali City, with implementation ongoing in Gicumbi and Rubavu districts. The automation of all the SACCOs is expected to be completed during the second half of 2023.

Developing solutions that are fully integrated, covering all aspects of value-chain activities, would provide benefits for all value-chain actors. There are several digital innovations that have been implemented in the tea sector, such as digital farmer registries and the use of digital weighing scales. These have delivered some efficiency savings and greater transparency for farmers, increasing their interest in digital technology. Nevertheless, some of the gains have been restricted, and the potential for reaping greater economies of scale has been undermined by the lack of digitization in other parts of the tea value chain.



**To urgently address the lack of trust in digital payments, it is recommended that the factories, cooperatives, and FSPs, under the leadership of NAEB, cooperate to deploy digital solutions and set up working groups - to improve transparency in pricing, payments, and deductions, and agent operations.**

Among farmers, there was an underlying distrust of digital payments systems. In the areas where digital payments systems have been implemented, a third of farmers were concerned about fraud on digital platforms. Farmers encounter issues of transparency at two levels: on pricing and deductions made by cooperatives, and on charges by FSPs. They consider digital systems as opaque with limited or no transparency on deductions. Farmers in non-automated tea SACCOs face lengthy delays in getting payments and a lack of transparency on account reconciliation.

Instances of additional, unauthorized fees being applied by mobile money agents have also been encountered by farmers (outside the traditional pricing published by the MMOs). Farmers are also not able to obtain statements of accounts easily.

## 6

**Strengthening recourse mechanisms for smallholder farmers not only increases trust but also reduces the time spent following up on queries affecting farmers. Factories and cooperatives will need to work with FSPs to strengthen and make clear to farmers their grievance-redressal systems. NAEB, in its capacity as regulator and working with BNR, is continuing to enforce the Financial Consumer Protection Law.**

The surge of digital services means that providers are increasingly engaging with first-time users of digital payments, and are therefore likely to need additional support. The recourse mechanisms on certain platforms are not clearly documented for users and there is still limited awareness of them among users. Late payments are also experienced by farmers due to delays between the factories and the SACCOs. On the regulatory front, existing digital payments laws do not provide clarity on how the ethical implications of payments technology will be handled or addressed. Given their proximity to farmers, cooperatives and tea factories are well positioned to support awareness-raising efforts on digital financial security and recourse mechanisms; but FSPs also have a responsibility to raise service standards on recourse responses, leveraging community-based structures. The new Financial Consumer Protection Law also empowers the regulator to work with FSPs to develop redressal mechanisms that bring trust and confidence to the farmers.



# Methodology

The findings reported here are based on responses from over 500 people in the tea sector. These included 415 survey respondents who were smallholder farmers (34 percent women), 80 farmers (57 percent women) participating in 10 focus group discussions (FGDs), and 30 representatives of key stakeholder groups taking part in key informant interviews (see Figure 2). The study covered farmers associated with five tea factories in Northern, Western, and Southern provinces. While the research mainly focused on smallholder tea farmers, five factory workers from one tea factory were engaged in a focus group discussion to understand their experiences of digital payments (Box 1).

FIGURE 2  
Methodology

## RESEARCH GOAL

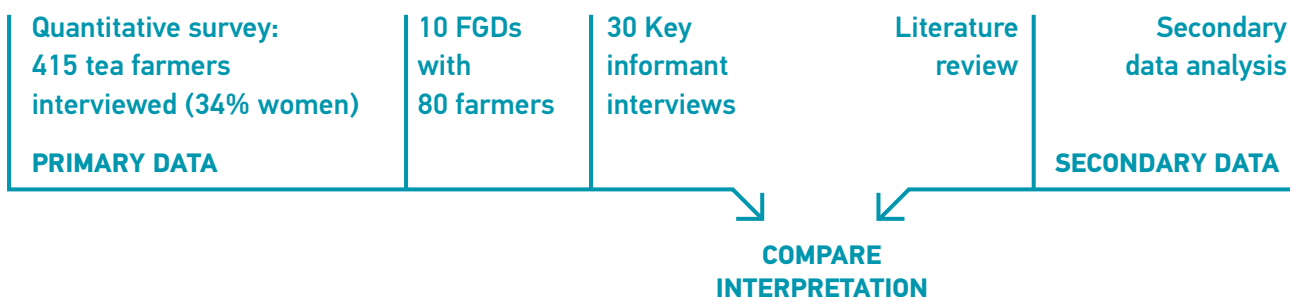
How do digital payments lead to improved incomes for tea farmers and increased efficiency for tea factories in Rwanda?

## 1. RESEARCH SCOPE

Through the lens of the United Nations Principles for Responsible Digital Payments:

Understand the payments ecosystem for tea farmers, including the use cases	Define the opportunities for and limitations to digital payment adoption by farmers	Explore digital payment initiatives that could be adapted for the tea sector and increase uptake of digital solutions in agriculture more broadly	Understand how all stakeholders can work together to achieve responsible scale up of digital payments
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## 2. RESEARCH APPROACH Digital payment assessment



## 3. ANALYSIS AND RECOMMENDATIONS

A digital payment assessment of the tea sector with action-driven recommendations for key stakeholders to promote and scale responsible digital payments in the tea sector



## BOX 1

**Tea factory workers' experiences of digital payments**

While this assignment mainly focused on smallholder tea farmers, the field team took the opportunity to interview a small number of tea factory workers in a focus group discussion - five workers from one tea factory. Feedback from these workers and an interview with the factory owner indicated that almost all workers were moved to digital payment platforms because of the pandemic. The platforms used were mainly the mobile money solutions available from MTN and Airtel Money.

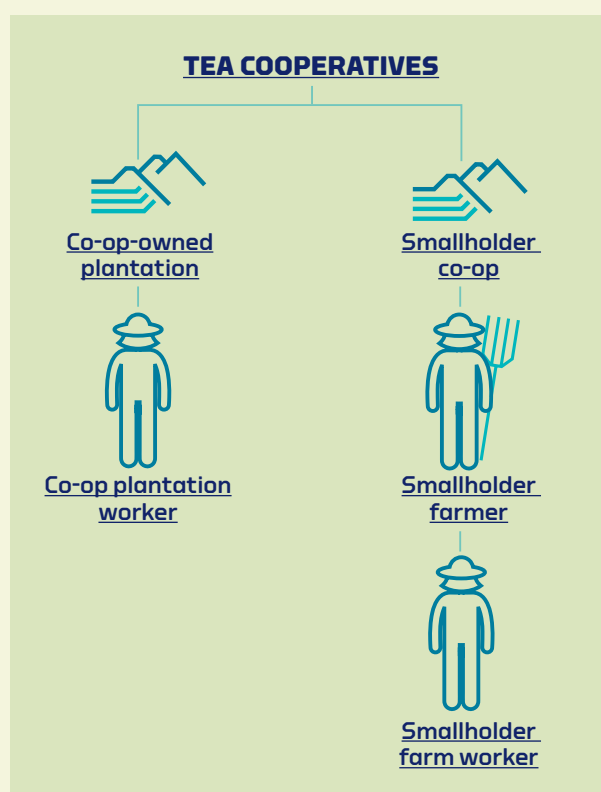
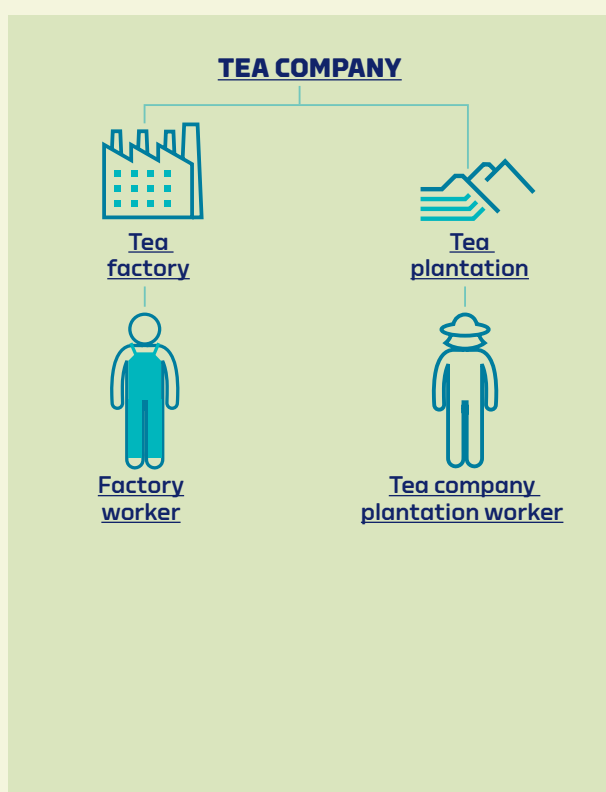
The benefits and challenges identified in the use of these digital systems were similar to those experienced by the smallholder farmers who participated in this research.

**Benefits**

- Being paid via mobile money saves time, and payments are received quickly.
- There are lower charges involved when paid via mobile money. Workers previously spent significant sums on transport when they had to collect their payments from their SACCO.
- They can manage their money better than when they have cash in hand.

**Challenges**

- It is not always possible to pay for other goods and services using mobile money, since most people use cash.
- Some women workers had experienced fraud at the hands of the agents.
- Users also complained of the system language automatically changing to English from Kinyarwanda.



## Acknowledgements

Among many others, the authors would also like to thank the following and countless other stakeholders for making their time available and sharing valuable information with us.

**The project team:** Marjolaine Chaintreau and Fareeza Ibrahim from the Better Than Cash Alliance, and Janvier Afrika, Jenny Costelloe, Anu Huhtisaari, and Liberal Seburikoko from the Ethical Tea Partnership.

**The research team:** Diane Dusabeyezu, Kato Kimbugwe, Emmanuel Kwizera, Sanjay Kumar, Zula Mucyo, Magnifique Mukundwa, and Solange Rwema from Vanguard Economics.

**Representatives of the Government of Rwanda:** Ministry of Agriculture and Animal Resources, Ministry of Finance and Economic Planning, Ministry of ICT and Innovation, National Agricultural Export Development Board, and National Bank of Rwanda.

**The senior leadership of the tea companies:** Cyato Tea Company, Rwanda Mountain Tea, Muganza Kivu Tea Company, and Sorwathe.

**Representatives of smallholder tea farmers and their respective cooperatives:** Fédération Rwandaise des Coopératives des Théiculteurs, Coopthe Mulindi, Hillside Organic Tea Cooperative (in Rulindo), Cothecyaka, Cothemuki, Cothevm, and Kobacyamu.

## Notes

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**The Better Than Cash Alliance** is a United Nations-based partnership of governments, companies, and international organizations that accelerates the transition from cash to responsible digital payments to advance the Sustainable Development Goals.

[www.BetterThanCash.org](http://www.BetterThanCash.org)



**The Ethical Tea Partnership** is a membership organization working with tea companies, development organizations and governments to improve the lives of tea workers, farmers and their environment. Our aim is to drive long-term, systemic change across three thematic areas in tea - economics, equality and environment. ETP's work improves the progress that is being made towards attaining the United Nation's Sustainable Development Goals in tea-growing regions.

[www.ethicalteapartnership.org](http://www.ethicalteapartnership.org)

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